

Division of Environmental Health and Communicable Disease Prevention									
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Campylobacteriosis
Campylobacteriosis Fact Sheet
Record of Investigation of Enteric Illness (CD-2C – rev. 6/02)

To Suppose	Division of Environmental Health and Communicable Disease Prevention									
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Campylobacteriosis

Overview (1,2)

For a complete description of campylobacteriosis, refer to the following texts:

- Control of Communicable Diseases Manual (CCDM).
- Red Book, Report of the Committee on Infectious Diseases.

Case Definition(3)

Clinical description

An infection that may result in diarrheal illness of variable severity.

Laboratory criteria for diagnosis

Isolation of Campylobacter from any clinical specimen.

Case classification

Confirmed: a case that is laboratory confirmed.

Probable: a clinically compatible case that is epidemiologically linked to a confirmed case.

Information Needed for Investigation

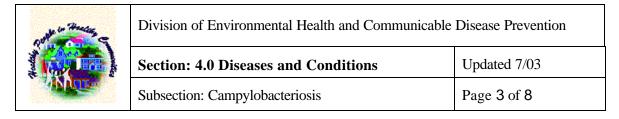
- Verify the diagnosis. What laboratory tests were conducted and what were the results?
- When investigating gastrointestinal illness of unknown etiology, see the "Outbreak Investigation, Acute Gastroenteritis" section of this Manual.
- Establish the extent of illness. Determine if household or other close contacts are, or have been, ill by contacting the health care provider, patient or family member.
- Contact the Regional Communicable Disease Coordinator, if an outbreak is <u>suspected</u>, or if cases are in high-risk settings or jobs such as food handlers, child care, or health care.
- Contact the Bureau of Child Care, if cases are associated with a child care facility.

Case/Contact Follow Up And Control Measures

Determine the source of infection to prevent other cases:

- Does the case or a member of the case's household attend a child care center or nursery school?
- Does the case or a member of the case's household work as a food handler or healthcare provider?
- Has the case traveled out of the country to an endemic area?

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- Does the case have contact with excreta from wild or domestic animals (including kittens or puppies)?
- Does the case work in poultry or other animal operations?
- Have there been other cases linked by time, place or person?

Control Measures

- See the <u>Control of Communicable Diseases Manual</u>, *Campylobacter* Enteritis, "Methods of control."
- See the <u>Red Book</u>, *Campylobacter* Infections, "Control Measures."

• Food Handlers and Health Care Personnel:

Because of the known risk of transmission of enteric pathogens from individuals with diarrhea, food handlers and symptomatic health care personnel with patient care responsibilities should **not** be permitted to work until the diarrhea has ended. Asymptomatically infected food handlers or health care personnel need **not** be excluded from work, but the need for handwashing after defecation should be stressed. Exclusion of asymptomatic, convalescent, stool-positive individuals is indicated only for those with questionable handwashing habits. (1)

• Child Care Employees and Attendees:

Symptomatic childcare employees should <u>not</u> be permitted to work until the diarrhea has ended. The need for handwashing after defecation should be stressed. Exclusion of asymptomatic, convalescent, stool-positive individuals is indicated only for those with questionable handwashing habits. Children with diarrhea should be excluded from child care, or cared for in a separate protected area until diarrhea has subsided. In child care settings where children are not toilet-trained, it is prudent to treat with antibiotics. Symptomatic children should be excluded from child care for two days after beginning antibiotics or until the child is asymptomatic, whichever is the shorter period of time. Proper hand washing technique after changing diapers and before food preparation is very important. Toys, countertops, and diaper changing areas should be cleaned more frequently, especially if used by children with diarrhea.

All rules and guidelines regarding hand washing, toileting, diapering, and food handling, referenced in <u>Licensing Rules for Group Day Care Homes and Child Day Care Centers</u> (7) should be followed rigorously.

Laboratory Procedures

Specimens: Diagnosis is based on culture of the organism from feces or blood. The cultured organism should be tested for antibiotic sensitivities. In addition, a rise in the IgG titer can be detected. The use of serologic methods for diagnosis is at present a research tool only. Use of PCR techniques for direct detection of specimens has been successful in research studies, but has not yet been applied to the clinical setting. ⁽⁶⁾

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Enteric cultures:

Collect specimens in Cary-Blair media using the enteric specimen collection kit supplied by the State Public Health Laboratory. Specimens should be shipped chilled.

Additional information on laboratory procedures can be obtained from the Regional Communicable Disease Coordinator or from the SPHL web site at: http://www.dhss.state.mo.us/Lab/index.htm. (8 May 2003)

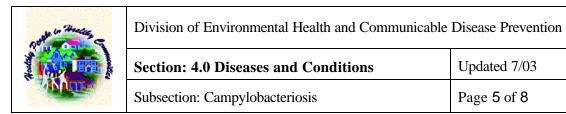
Reporting Requirements

Campylobacteriosis is a Category II reportable disease and shall be reported to the local health authority or to the Missouri Department of Health and Senior Services (DHSS) within three days of first knowledge or suspicion by telephone, facsimile, or rapid communication.

- 1. For confirmed and probable cases, complete a "Disease Case Report" (CD-1) and a "Record of Investigation of Enteric Infection" (CD-2C) revised 6/02.
- 2. Entry of the completed CD-1 into the MOHSIS database negates the need for the paper CD-1 to be forwarded to the Regional Health Office.
- 3. Send the completed secondary investigation form to the Regional Health Office.
- 4. All outbreaks or "suspected" outbreaks must be reported as soon as possible (by phone, fax, or e-mail) to the Regional Communicable Disease Coordinator. This can be accomplished by completing the Missouri Outbreak Surveillance Report (CD-51).
- 5. Within 90 days from the conclusion of an outbreak, submit the final outbreak report to the Regional Communicable Disease Coordinator.

References

- 1. Chin, James, ed. "*Campylobacter* Enteritis." <u>Control of Communicable Diseases Manual</u>, 17th ed. Washington, D.C.: APHA, 2000: 79-81.
- American Academy of Pediatrics. "Campylobacter Infections." In: Pickering L., ed. 2000 Red Book:Report of the Committee on Infectious Diseases. 25th ed. Elk Grove Village, IL. 2000: 196-198.
- 3. Centers for Disease Control and Prevention. <u>Case Definitions for Infectious Conditions Under Public Health Surveillance</u>. MMWR 1997; 46 (No. RR-10). "Campylobacter Infection," 1990, http://www.cdc.gov/epo/dphsi/casedef/campylobactercurrent.htm. (8 May 2003)
- 4. Evans, AS and Brachman, PS, ed. <u>Bacterial Infections of Humans Epidemiology and Control</u>, 3rd ed. New York: Plenum, 1998: 169-190.
- 5. Donowitz, LG, ed <u>Infection Control in the Child Care Center and Preschool</u>, 4th ed. Baltimore: Waverly, 1999: 101-104.
- 6. Mandell, GL, Bennett, JE, and Dolin, R, ed. <u>Mandell Douglas and Bennett's Principles and</u> Practice of Infectious Diseases, 5th ed; vol 2. New York: Churchill Livingstone, 2000: 2276-2285.



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7. Missouri Department of Health and Senior Services. 19 CSR 30-62-Health. Chapter 62-Licensing Rules for Group Day Care Homes and Child Day Care Centers. http://www.sos.state.mo.us/adrules/csr/current/19csr/19c30-62.pdf. (8 May 2003)

Other Sources of Information

- National Center for Infectious Diseases, Campylobacter Infections, http://www.cdc.gov/ncidod/dbmd/diseaseinfo/campylobacter g.htm. (8 May 2003)
- 2. Missouri Department of Health and Senior Services, Community Data Profile, http://www.dhss.state.mo.us/GLRequest/CountyProfile.html. (8 May 2003)
- 3. FDA/CFSAN Bad Bug Book, Campylobacter jejuni http://www.cfsan.fda.gov/~mow/chap4.html. (8 May 2003)
- 4. Karolinska Institutet (Swedish Medical School), Alphabetical Listing of Diseases and Disorders http://www.mic.ki.se/Diseases/alphalist.html. (8 May 2003)
- 5. The Merck Veterinary Manual. 8th Ed. Ed. Susan E. Aiello. Whitehouse Station, NJ: Merck & Co., Inc., 1998. http://www.merckvetmanual.com/mvm/index.jsp (search "campylobacter"). (8 May 2003)

CAMPYLOBACTER INFECTION

(Campylobacteriosis) FACT SHEET

What is Campylobacter?

Campylobacter is a bacterium that infects the intestines. It is the most common bacterial cause of diarrheal illness in the United States.

What are the symptoms?

Symptoms are usually diarrhea (sometimes bloody), stomachache, fever, nausea and vomiting. The illness usually ends by itself within one week, but some people may require treatment with antibiotics.

How is *Campylobacter* spread?

The bacteria are found in human and animal feces. It is very common in cattle and chickens. People can get it by eating or drinking raw or contaminated water, milk, poultry, meat, or from infected pets and other animals. It is very rare to get *Campylobacter* from another person who has it.

How long from when a person is infected until they get ill?

Usually people get sick within two to five days of infection with these bacteria, but it can be as short as one day to as long as ten days before illness occurs.

How can Campylobacter infection be prevented?

It can be prevented by properly cooking poultry and meats to at least 165° F; by thorough hand-washing with soap after using the toilet; before handling any food and after handling raw foods; only drinking pasteurized milk; and never drinking water from creeks, lakes, or springs.

Where can I get more information about campylobacteriosis?

To find out more, call your doctor or local public health agency. Only a special laboratory test can tell if someone is infected.

Missouri Department of Health and Senior Services Section for Communicable Disease Prevention Phone: (866) 628-9891 or (573) 751-6113



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES SECTION OF COMMUNICABLE DISEASE CONTROL AND VETERINARY PUBLIC HEALTH

RECORD OF INVESTIGATION OF ENTERIC ILLNESS

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^{*} Epi Calendar (reverse side) may be used to help determine time periods.
** Attach separate 3-day food history if multiple cases are known/suspected.

Laboratory Tests*: Record Diagnostic Information in Section 41 of CD-1 Report and/or attach copy of lab slip(s)													
Are there other associated cases?						many?	many? How Associated:						
List ill contacts													
NAME & A	DOB / AGE	SEX	REL PA	SIMILAR ILLNESS YES NO		ONSET DATE	CONF YES	LAB CONFIRMED		CD-1 AND ENTERIC FORM COMPLETED YES NO			
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Sunday	Monday	Tuesday	-	Wedneso	day	Thursday		_ Friday	_	_ Satu		_	
OTHER PERTINENT EPIDEMIOLOGICAL DATA (TO INCLUDE PROBABLE SOURCE):													
INVESTIGATOR:									DATE COM	PLETED:			
	INVESTIGATOR: DATE COMPLETED:												

MO 580-0802 (6-02)